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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/886,729	06/21/2001	Jong-Shing Guo	393312	6053

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Kenneth D. Goetz
Lathrop & Gage, LC
Suite 2800
2345 Grand Boulevard
Kansas City, MO 64108

EXAMINER

EGWIM, KELECHI CHIDI

ART UNIT

PAPER NUMBER

1713

DATE MAILED: 05/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

AS

Office Action Summary

Application No.

09/886,729

Applicant(s)

GUO ET AL.

Examiner

Dr. Kelechi C. Egwim

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9, 12, 13 and 28 is/are pending in the application.
- 4a) Of the above claim(s) 28 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 13 is/are rejected.
- 7) ☒ Claim(s) 9 and 12 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 03/16/2004 has been entered.

Election/Restrictions

2. Newly submitted claim 28 is directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: It is directed to the non-elected invention corresponding to a process wherein the non-free radical polymerizable acid is added to the polymerization mixture after initiating polymerization.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claim 28 is withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

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The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 13 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. Claim 13 lacks proper antecedent bases since it depends from claims 10 and 11 that are now cancelled.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1-5 and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Coopridier et al. (USPN 5,571,617).

In col. 1, lines 52-52, Coopridier et al. teach a process for preparing solid polymeric pressure sensitive adhesive microspheres comprising contacting a polymerizable aqueous emulsion of at least one non-ionic monomer, such as 2-ethyl hexyl acrylate or n-butyl acrylate (col. 3, lines 59-62), and at least one ionic monomer,

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such as acrylic acid (col. 5, lines 6-9), and at least one non-free radically polymerizable acid stabilizer (col. 6, line 1); and polymerizing the emulsion by suspension polymerization (col. 2, lines 4-6) to form an aqueous suspension of said solid polymeric pressure sensitive adhesive microspheres.

Thus, the requirements for rejection under 35 U.S.C. 102(b) are met.

8. Claims 1-6 and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Delgado et al. (USPN 5,508,313) or Morris et al. (USPN 5,514,122) and under 35 U.S.C. 102(e) as being anticipated by Cantor et al. (USPN 6,312,715).

Each of Delgado et al. (col. 4, line 57 to col. 6, line 33 and col. 10, lines 5-7), Morris et al. (col. 2, line 27 to col. 3, line 24 and col. 5, lines 1-19) and Cantor et al. (col. 3, lines 20-32, col. 4, lines 35-37 and col. 6, lines 12-15) teach a process for preparing solid polymeric pressure sensitive adhesive microspheres comprising contacting a polymerizable aqueous emulsion of at least one non-ionic monomer, such as 2-ethyl hexyl acrylate or n-butyl acrylate, and at least one ionic monomer, such as sodium acrylate, and at least one non-free radically polymerizable acid stabilizer; and polymerizing the emulsion by suspension polymerization to form an aqueous suspension of said solid polymeric pressure sensitive adhesive microspheres.

Thus, the requirements for rejection under 35 U.S.C. 102(b and e) are met.

9. Claims 1-5, 8 and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Mallya et al. (USPN 5,656,705).

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In col. 2, lines 23-46 and col. 4, lines 1-4, Mallya et al. teach a process for preparing solid polymeric pressure sensitive adhesive microspheres comprising preparing an aqueous emulsion of at least one non-ionic monomer, such as 2-ethyl hexyl acrylate, and at least one ionic monomer, such as acrylic acid, and buffers, such as an acetic acid buffer system comprising acetic acid and its salt, and polymerizing the emulsion by suspension polymerization to form an aqueous suspension of solid polymeric pressure sensitive adhesive microspheres.

Thus, the requirements for rejection under 35 U.S.C. 102(b) are met.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Delgado et al., Morris et al. or Cantor et al.

Delgado et al., Morris et al. or Cantor et al., above, differ from the claimed invention in that the ionic monomer is not taught to be produced "in-situ" by the addition of the counter-ion compound to the acid monomer in the polymerization mixture. However, the in-situ formation of the acid salt is prima facie obvious and would result in the same acid salt formation as if the acid and counter-ion were added together. Further, since the acid and the salt are at equilibrium, the presence of one necessitates,

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at least to some extent, the presence of the other. Applicant has failed to point out the criticality of the in-situ formation of the salt of the acid monomer in the embodiment of this invention.

12. Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Coopridier et al. or Mallya et al.

Coopridier et al. or Mallya et al., above, differ from the claimed invention in that the acid monomer is not taught as the sodium salt and the salt is not taught to be produced "in-situ" by the addition of the counter-ion compound to the acid monomer in the polymerization mixture. Since the acid and the salt are at equilibrium, the presence of acid monomer obviates the presence of some of its salt. Further, the in-situ formation of the acid salt is prima facie obvious and would result in the same acid salt formation as if the acid and counter-ion were added together. Applicant has failed to point out the criticality of the salt over the acid monomer or the formation of the salt of the acid monomer in the embodiment of this invention. The applicant has not shown unexpected results from the sodium acid monomer salt.

Allowable Subject Matter

13. Claims 9 and 12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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The following is a statement of reasons for the indication of allowable subject matter: None of the prior art was found to teach or sufficiently suggest the use of sulfuric acid as the non-free radically polymerizable acid in the present process for preparing the solid polymeric pressure sensitive adhesive microspheres. Also, none of the prior art was found to teach or sufficiently suggest the further adding of a water-soluble initiator to the polymerization mixture after achieving about 90% conversion of the non-ionic monomer.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dr. Kelechi C. Egwim whose telephone number is (703) 306-5701. The examiner can normally be reached on M-T (7:30-6:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on (703) 308-2450. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KCE



KELECHI C. EGWIM PH.D.
PRIMARY EXAMINER